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      (FILE 'HOME' ENTERED AT 15:10:41 ON 07 AUG 2002)

FILE 'REGISTRY' ENTERED AT 15:10:51 ON 07 AUG 2002
L1      2 S LYSINE/CN

FILE 'HCAPLUS' ENTERED AT 15:10:58 ON 07 AUG 2002

FILE 'REGISTRY' ENTERED AT 15:11:03 ON 07 AUG 2002
      SET SMARTSELECT ON
L2      SEL L1 1- CHEM :      28 TERMS
      SET SMARTSELECT OFF

FILE 'HCAPLUS' ENTERED AT 15:11:04 ON 07 AUG 2002
L3      90749 S L2
L4      1339 S L3 (L) TRANSCRIPT?
L5      1030 S CORYNEFORM BACTERIA OR CORYNEFORM OR (BACTERIA (L) CORYNEFORM
L6      10 S L5 (L) L4
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=> d ibib ab 1-10

L6 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:256495 HCAPLUS
DOCUMENT NUMBER: 136:293614
TITLE: Sequence of mikel7 gene from corynebacteria and use thereof in synthesis of L-lysine
INVENTOR(S): Farwick, Mike; Huthmacher, Klaus; Pfefferle, Walter
PATENT ASSIGNEE(S): Degussa A.-G., Germany
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002027009	A1	20020404	WO 2001-EP8781	20010728
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10113958	A1	20020418	DE 2001-10113958	20010322
PRIORITY APPLN. INFO.: DE 2000-10047867 A 20000927				
DE 2001-10113958 A 20010322				

AB The mikel7 gene of Corynebacterium glutamicum ATCC13032 encoding a **transcription** factor is cloned for use in increasing the efficiency of fermn. of **L-lysine** by **coryneform bacteria**. The expression vector contg. mikel7 gene is constructed. Methods and culture media for fermentative prepn. of **L-lysine** with recombinant bacterial strains transformed with these vectors are also provided. Disruption of the mikel7 gene by integration mutagenesis using mikel7 expression vector increased the yield of **lysine** in a Corynebacterium host from 13.05 g **lysine**/L at 7.4 OD660 to 15.14 g **lysine**/L at 7.6 OD660. The fermentatively prepd. **L-lysine** are useful in pharmaceutical industry and foodstuff industry and very particularly in animal nutrition.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:185331 HCAPLUS
DOCUMENT NUMBER: 136:246478
TITLE: Sequence of chrA gene from corynebacteria and use thereof in synthesis of L-lysine
INVENTOR(S): Bathe, Brigitte; Schischka, Natalie; Marx, Achim; Pfefferle, Walter
PATENT ASSIGNEE(S): Degussa A.-G., Germany
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002020793	A1	20020314	WO 2001-EP9098	20010807
WO 2002020793	C1	20020613		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
 RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
 VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10112098 A1 20020328 DE 2001-10112098 20010314
 PRIORITY APPLN. INFO.: DE 2000-10044756 A 20000909
 DE 2001-10112098 A 20010314

AB The chrA gene of Corynebacterium glutamicum ATCC13032 encoding a **transcription** regulator is cloned for use in increasing the efficiency of fermn. of **L-lysine** by **coryneform bacteria**. The expression vector contg. chrA gene is constructed. Methods and culture media for fermentative prepn. of **L-lysine** with recombinant bacterial strains transformed with these vectors are also provided. Disruption of the chrA gene by integration mutagenesis using chrA expression vector increased the yield of **lysine** in a Corynebacterium host from 13.05 g **lysine**/L at 7.4 OD660 to 14.27 g **lysine**/L at 7.6 OD660. The fermentatively prepd. **L-lysine** are useful in pharmaceutical industry and foodstuff industry and very particularly in animal nutrition.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:172098 HCAPLUS

DOCUMENT NUMBER: 136:215516

TITLE: Citb gene from corynebacteria and use thereof in synthesis of L-lysine or valine

INVENTOR(S): Moeckel, Bettina; Hermann, Thomas; Farwick, Mike; Pfefferle, Walter; Marx, Achim

PATENT ASSIGNEE(S): Degussa Ag, Germany

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002018596	A1	20020307	WO 2001-EP8387	20010720
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

DE 10108841 A1 20020314 DE 2001-10108841 20010223

US 2002086372 A1 20020704 US 2001-942937 20010831

PRIORITY APPLN. INFO.: DE 2000-10042741 A 20000831

DE 2001-10108841 A 20010223

AB The Citb gene of Corynebacterium glutamicum ATCC13032 encoding a **transcription** regulator of a two-component system is cloned for use in increasing the efficiency of fermn. of **L-lysine** by **coryneform bacteria**. The expression vector contg. Citb gene is constructed. Methods and culture media for fermentative prepn. of **L-lysine** or L-valine with recombinant bacterial strains transformed with these vectors are also provided. Disruption of the Citb gene by integration mutagenesis using Citb expression vector increased the yield of **lysine** in a

Corynebacterium host from 13.1 g **lysine**/L at 7.5 OD660 to 14.4 g **lysine**/L at 7.6 OD660, and of valine in a Corynebacterium host from 7.5 g **lysine**/L at 12.1 OD660 to 11.3 g **lysine**/L at 13.3 OD660. The fermentatively prepd. **L-lysine** are useful in pharmaceutical industry and foodstuff industry and very particularly in animal nutrition.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:171943 HCAPLUS

DOCUMENT NUMBER: 136:231334

TITLE: Sequence of oxyR gene from corynebacteria and use thereof in synthesis of L-lysine

INVENTOR(S): Marx, Achim; Farwick, Mike; Hermann, Thomas; Schischka, Natalie; Bathe, Brigitte

PATENT ASSIGNEE(S): Degussa Ag, Germany

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002018431	A1	20020307	WO 2001-EP8388	20010720
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
DE 10110053	A1	20020307	DE 2001-10110053	20010302
US 2002064839	A1	20020530	US 2001-938641	20010827
PRIORITY APPLN. INFO.:			DE 2000-10042052 A	20000826
			DE 2001-10110053 A	20010302
			US 2001-279415P P	20010329

AB The oxyR gene of Corynebacterium glutamicum ATCC13032 encoding a **transcription** regulator is cloned for use in increasing the efficiency of fermn. of **L-lysine** by **coryneform bacteria**. The expression vector contg. oxyR gene is constructed. Methods and culture media for fermentative prepn. of **L-lysine** with recombinant bacterial strains transformed with these vectors are also provided. Enhancement of the oxyR gene expression by oxyR shuttle vector increased the yield of **lysine** in a Corynebacterium host from 13.68 g **lysine**/L at 6.8 OD660 to 14.73 g **lysine**/L at 6.5 OD660. The fermentatively prepd. **L-lysine** are useful in pharmaceutical industry and foodstuff industry and very particularly in animal nutrition.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:123219 HCAPLUS

DOCUMENT NUMBER: 136:182549

TITLE: Sequences of Corynebacterium glutamicum gene lysR3 encoding transcription regulator and its use in increasing yields of L-lysine and L-valine in fermentation

INVENTOR(S): Moeckel, Bettina; Kreutzer, Caroline

PATENT ASSIGNEE(S): Degussa A.-G., Germany

SOURCE: PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002012505	A1	20020214	WO 2001-EP7765	20010706
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
DE 10039049	A1	20020221	DE 2000-10039049	20000810
AU 2001076385	A5	20020218	AU 2001-76385	20010706
PRIORITY APPLN. INFO.:			DE 2000-10039049 A	20000810
			US 2001-867537 A	20010531
			WO 2001-EP7765 W	20010706

AB The invention provides sequences of *Corynebacterium glutamicum* gene *lysR3* that encodes a novel **transcription** regulator, and its uses in increasing the efficiency of fermn. of **L-lysine** and L-valine in **coryneform bacteria** by attenuation of the *lysR3* gene. The gene was identified by querying a *C. glutamicum* sequence database for homologs of known *lysR3* genes.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:123218 HCAPLUS

DOCUMENT NUMBER: 136:182548

TITLE: Sequences of *Corynebacterium glutamicum* gene *lysR2* encoding transcription regulator and its use in increasing yields of L-lysine and L-valine in fermentation

INVENTOR(S): Moeckel, Bettina; Farwick, Mike; Hermann, Thomas; Kreutzer, Caroline; Pfefferle, Walter

PATENT ASSIGNEE(S): Degussa A.-G., Germany

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002012504	A1	20020214	WO 2001-EP6808	20010615
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
DE 10110346	A1	20020221	DE 2001-10110346	20010303
AU 2001079663	A5	20020218	AU 2001-79663	20010615
US 2002081674	A1	20020627	US 2001-826909	20010724
PRIORITY APPLN. INFO.:			DE 2000-10039047 A	20000810
			DE 2001-10110346 A	20010303
			WO 2001-EP6808 W	20010615

AB The invention provides sequences of *Corynebacterium glutamicum* gene *lysR2*

that encodes a novel **transcription** regulator, and its uses in increasing the efficiency of fermn. of **L-lysine** and L-valine in **coryneform bacteria** by attenuation of the lysR2 gene. The gene was identified by querying a C. glutamicum sequence database for homologs of known lysR2 genes.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2002:123057 HCAPLUS
 DOCUMENT NUMBER: 136:182547
 TITLE: Sequences of Corynebacterium glutamicum gene lysR1 encoding transcription regulator and its use in increasing yields of L-lysine in fermentation
 INVENTOR(S): Moeckel, Bettina; Farwick, Mike; Hermann, Thomas; Kreutzer, Caroline; Pfefferle, Walter
 PATENT ASSIGNEE(S): Degussa A.-G., Germany
 SOURCE: PCT Int. Appl., 38 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002012295	A1	20020214	WO 2001-EP8258	20010718
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10039044	A1	20020221	DE 2000-10039044	20000810
AU 2001089674	A5	20020218	AU 2001-89674	20010718
PRIORITY APPLN. INFO.: DE 2000-10039044 A 20000810 WO 2001-EP8258 W 20010718				
AB The invention provides sequences of Corynebacterium glutamicum gene lysR1 that encodes a novel transcription regulator, and its uses in increasing the efficiency of fermn. of L-lysine in coryneform bacteria by attenuation of the lysR1 gene. The gene was identified by querying a C. glutamicum sequence database for homologs of known lysR1 genes.				
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L6 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2002:123053 HCAPLUS
 DOCUMENT NUMBER: 136:182546
 TITLE: Sequences of Corynebacterium glutamicum gene luxR encoding transcription regulator and its use in increasing yields of L-lysine in fermentation
 INVENTOR(S): Moeckel, Bettina; Kreutzer, Caroline; Bathe, Brigitte
 PATENT ASSIGNEE(S): Degussa A.-G., Germany
 SOURCE: PCT Int. Appl., 32 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002012291	A2	20020214	WO 2001-EP8256	20010718

WO 2002012291 A3 20020627

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10039043 A1 20020221 DE 2000-10039043 20000810

US 2002086404 A1 20020704 US 2001-903771 20010713

AU 2002010420 A5 20020218 AU 2002-10420 20010718

PRIORITY APPLN. INFO.:

DE 2000-10039043 A 20000810

WO 2001-EP8256 W 20010718

AB The invention provides sequences of Corynebacterium glutamicum gene luxR that encodes a novel **transcription** regulator, and its uses in increasing the efficiency of fermn. of **L-lysine** in **coryneform bacteria** by attenuation of the luxR gene. The gene was identified by querying a C. glutamicum sequence database for homologs of known luxR genes.

L6 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:28655 HCAPLUS

DOCUMENT NUMBER: 134:99670

TITLE: L-lysine producing coryneform bacteria and methods for the production of l-lysine

INVENTOR(S): Kreutzer, Caroline; Mockel, Bettina; Pfefferle, Walter; Eggeling, Lothar; Sahm, Hermann; Patek, Miroslav

PATENT ASSIGNEE(S): Degussa-Huels Aktiengesellschaft, Germany; Forschungszentrum Juelich

SOURCE: Eur. Pat. Appl., 28 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1067193	A1	20010110	EP 2000-114502	20000706
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19931314	A1	20010111	DE 1999-19931314	19990707
JP 2001037495	A2	20010213	JP 2000-202550	20000704
BR 2000002445	A	20010508	BR 2000-2445	20000705
CN 1280185	A	20010117	CN 2000-120357	20000707

PRIORITY APPLN. INFO.:

DE 1999-19931314 A 19990707

AB The invention concerns the prodn. of L-amino acids by coryneform bacteria strain comprising an enhanced pyc gene (Pyruvat-carboxylase-gene), addnl. genes are chosen from the dapA gene group (dihydrodipicolinate synthase gene), lysC gene (aspartate kinase gene), lysE gene (lysine-export-carrier-gene), dapB gene (dihydrodipicolinate reductase gene), that are used by one or together. The dapA gene was most effective enhancer of L-lysine prodn. The following L-lysine strain producers were established: Escherichia coli K12 DSM 12871, DSM 12875, and Corynebacterium glutamicum DSM 12869, DSM 12867, DSM 12868, DSM 12866.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:28654 HCAPLUS

DOCUMENT NUMBER: 134:99669

TITLE: L-lysine producing coryneform bacteria and methods for the production of L-lysine

INVENTOR(S): Mockel, Bettina; Pfefferle, Walter; Kreutzer,

PATENT ASSIGNEE(S): Caroline; Hans, Stephan; Rieping, Mechthild; Eggeling, Lothar; Sahm, Hermann; Patek, Miroslav
 SOURCE: Degussa-Huels Aktiengesellschaft, Germany; Forschungszentrum Juelich G.m.b.H.
 Eur. Pat. Appl., 25 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1067192	A1	20010110	EP 2000-114501	20000706
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
DE 19931317	A1	20010111	DE 1999-19931317	19990707
JP 2001061485	A2	20010313	JP 2000-202551	20000704
CN 1280184	A	20010117	CN 2000-109840	20000707
BR 2000002655	A	20010605	BR 2000-2655	20000707
PRIORITY APPLN. INFO.:			DE 1999-19931317 A	19990707

AB The invention concerns the prodn. of L-amino acids by coryneform bacteria strain comprising an enhanced lysE gene (lysin-export-carrier-gene), addnl. genes are chosen from the dapA gene group (dihydrodipicolinate synthase gene), lysC gene (aspartate kinase gene), dapB or pyc gene, that are used by one or together. The following L-lysine strain producers were established: Escherichia coli K12 DSM 12871, DSM 12875, and Corynebacterium glutamicum DSM 12869, DSM 12867, DSM 12868, DSM 12866.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

WEST Search History

DATE: Wednesday, August 07, 2002

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
<i>DB=USPT,PGPB; PLUR=YES; OP=ADJ</i>			
L13	L11 and l6	19	L13
L12	L11 and lysr1	0	L12
L11	L10 and @ad<20000810	25	L11
L10	L9 and (nucleotide or polynucleotide or nucleic acid)	35	L10
L9	L8 and (factor or regulat\$7)	35	L9
L8	L7 and lysine and transcript\$7	36	L8
L7	coryneform bacteria or coryneform	412	L7
L6	L5 or l4 or l3 or l2 or l1	20452	L6
L5	((((536/23.1)!.CCLS.))	7149	L5
L4	((((435/320.1)!.CCLS.))	12139	L4
L3	((((435/252.3)!.CCLS.))	5765	L3
L2	((((435/252.1)!.CCLS.))	1376	L2
L1	((435/69.1)!.CCLS.)	8372	L1

END OF SEARCH HISTORY

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Search Results - Record(s) 1 through 10 of 19 returned.

☐ 1. Document ID: US 6361986 B1

L13: Entry 1 of 19

File: USPT

US-PAT-NO: 6361986

DOCUMENT-IDENTIFIER: US 6361986 B1

TITLE: Process for the preparation of L-amino acids by fermentation and nucleotide sequences coding for the accDA gene

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
Draw Desc	Image										

☐ 2. Document ID: US 6255086 B1

L13: Entry 2 of 19

File: USPT

US-PAT-NO: 6255086

DOCUMENT-IDENTIFIER: US 6255086 B1

TITLE: Carbamoyl-phosphate synthetase gene of coryneform bacteria and method for producing L-arginine

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
Draw Desc	Image										

☐ 3. Document ID: US 6171833 B1

L13: Entry 3 of 19

File: USPT

US-PAT-NO: 6171833

DOCUMENT-IDENTIFIER: US 6171833 B1

TITLE: Pyruvate carboxylase from corynebacterium glutamicum

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
Draw Desc	Image										

☐ 4. Document ID: US 6040160 A

L13: Entry 4 of 19

File: USPT

US-PAT-NO: 6040160
DOCUMENT-IDENTIFIER: US 6040160 A

TITLE: Method of producing L-lysine by fermentation

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
Draw Desc	Image										

☐ 5. Document ID: US 6004773 A

L13: Entry 5 of 19

File: USPT

US-PAT-NO: 6004773
DOCUMENT-IDENTIFIER: US 6004773 A

TITLE: Method for producing L-lysine

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments		KWIC
Draw Desc	Image										

☐ 6. Document ID: US 5977331 A

L13: Entry 6 of 19

File: USPT

US-PAT-NO: 5977331
DOCUMENT-IDENTIFIER: US 5977331 A

TITLE: .alpha.-Ketoglutarate dehydrogenase gene

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments		KWIC
Draw Desc	Image										

☐ 7. Document ID: US 5929221 A

L13: Entry 7 of 19

File: USPT

US-PAT-NO: 5929221
DOCUMENT-IDENTIFIER: US 5929221 A

TITLE: Gene derived from coryneform bacteria and use thereof

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments		KWIC
Draw Desc	Image										

☐ 8. Document ID: US 5919694 A

L13: Entry 8 of 19

File: USPT

US-PAT-NO: 5919694

DOCUMENT-IDENTIFIER: US 5919694 A

TITLE: Mutant phosphoenolpyruvate carboxylase, its gene, and
production method of amino acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMIC

☐ 9. Document ID: US 5912161 A

L13: Entry 9 of 19

File: USPT

US-PAT-NO: 5912161

DOCUMENT-IDENTIFIER: US 5912161 A

TITLE: Enzymes for the production of 2-keto-L-gulonic acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMIC

☐ 10. Document ID: US 5876983 A

L13: Entry 10 of 19

File: USPT

US-PAT-NO: 5876983

DOCUMENT-IDENTIFIER: US 5876983 A

TITLE: Mutant phosphoenolpyruvate carboxylase, its gene, and
production method of amino acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

KMIC

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Search Results - Record(s) 1 through 10 of 19 returned.

☐ 1. Document ID: US 6361986 B1

L13: Entry 1 of 19

File: USPT

US-PAT-NO: 6361986

DOCUMENT-IDENTIFIER: US 6361986 B1

TITLE: Process for the preparation of L-amino acids by fermentation and nucleotide sequences coding for the accDA gene

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

[KWIC](#)☐ 2. Document ID: US 6255086 B1

L13: Entry 2 of 19

File: USPT

US-PAT-NO: 6255086

DOCUMENT-IDENTIFIER: US 6255086 B1

TITLE: Carbamoyl-phosphate synthetase gene of coryneform bacteria and method for producing L-arginine

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

[KWIC](#)☐ 3. Document ID: US 6171833 B1

L13: Entry 3 of 19

File: USPT

US-PAT-NO: 6171833

DOCUMENT-IDENTIFIER: US 6171833 B1

TITLE: Pyruvate carboxylase from corynebacterium glutamicum

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

[KWIC](#)☐ 4. Document ID: US 6040160 A

L13: Entry 4 of 19

File: USPT

US-PAT-NO: 6040160

DOCUMENT-IDENTIFIER: US 6040160 A

TITLE: Method of producing L-lysine by fermentation

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMIC

☐ 5. Document ID: US 6004773 A

L13: Entry 5 of 19

File: USPT

US-PAT-NO: 6004773

DOCUMENT-IDENTIFIER: US 6004773 A

TITLE: Method for producing L-lysine

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMIC

☐ 6. Document ID: US 5977331 A

L13: Entry 6 of 19

File: USPT

US-PAT-NO: 5977331

DOCUMENT-IDENTIFIER: US 5977331 A

TITLE: .alpha.-Ketoglutarate dehydrogenase gene

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMIC

☐ 7. Document ID: US 5929221 A

L13: Entry 7 of 19

File: USPT

US-PAT-NO: 5929221

DOCUMENT-IDENTIFIER: US 5929221 A

TITLE: Gene derived from coryneform bacteria and use thereof

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KMIC

☐ 8. Document ID: US 5919694 A

L13: Entry 8 of 19

File: USPT

US-PAT-NO: 5919694

DOCUMENT-IDENTIFIER: US 5919694 A

TITLE: Mutant phosphoenolpyruvate carboxylase, its gene, and
production method of amino acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw	Desc	Image								

☐ 9. Document ID: US 5912161 A

L13: Entry 9 of 19

File: USPT

US-PAT-NO: 5912161

DOCUMENT-IDENTIFIER: US 5912161 A

TITLE: Enzymes for the production of 2-keto-L-gulonic acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw	Desc	Image								

☐ 10. Document ID: US 5876983 A

L13: Entry 10 of 19

File: USPT

US-PAT-NO: 5876983

DOCUMENT-IDENTIFIER: US 5876983 A

TITLE: Mutant phosphoenolpyruvate carboxylase, its gene, and
production method of amino acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw	Desc	Image								

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WEST[Generate Collection](#)[Print](#)**Search Results - Record(s) 11 through 19 of 19 returned.**☐ 11. Document ID: US 5795761 A

L13: Entry 11 of 19

File: USPT

US-PAT-NO: 5795761

DOCUMENT-IDENTIFIER: US 5795761 A

TITLE: Mutants of 2,5-diketo-D-gluconic acid (2,5-DKG) reductase A

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw	Desc	Image								

☐ 12. Document ID: US 5656485 A

L13: Entry 12 of 19

File: USPT

US-PAT-NO: 5656485

DOCUMENT-IDENTIFIER: US 5656485 A

TITLE: Eimeria antigenic composition which elicits antibodies against avian coccidiosis

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw	Desc	Image								

☐ 13. Document ID: US 5583025 A

L13: Entry 13 of 19

File: USPT

US-PAT-NO: 5583025

DOCUMENT-IDENTIFIER: US 5583025 A

TITLE: Enzymes for the production of 2-keto-L-gulonic acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw	Desc	Image								

☐ 14. Document ID: US 5498532 A

L13: Entry 14 of 19

File: USPT

US-PAT-NO: 5498532
DOCUMENT-IDENTIFIER: US 5498532 A

TITLE: Process for producing amino acids

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

[KWIC](#)

☐ 15. Document ID: US 5380657 A

L13: Entry 15 of 19

File: USPT

US-PAT-NO: 5380657
DOCUMENT-IDENTIFIER: US 5380657 A

TITLE: Method for isolation of insertion elements from coryneform
bacteria

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

[KWIC](#)

☐ 16. Document ID: US 5376544 A

L13: Entry 16 of 19

File: USPT

US-PAT-NO: 5376544
DOCUMENT-IDENTIFIER: US 5376544 A

TITLE: Enzymes for the production of 2-keto-L-gulonic acid

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

[KWIC](#)

☐ 17. Document ID: US 5374551 A

L13: Entry 17 of 19

File: USPT

US-PAT-NO: 5374551
DOCUMENT-IDENTIFIER: US 5374551 A

TITLE: Methods for detection, identification and speciation of
members of the genus *Listeria*

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw	Desc	Image							

[KWIC](#)

☐ 18. Document ID: US 5279960 A

L13: Entry 18 of 19

File: USPT

US-PAT-NO: 5279960

DOCUMENT-IDENTIFIER: US 5279960 A

TITLE: 25 KD coccidial antigen of eimeria tenella

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KWWC

☐ 19. Document ID: US 5273901 A

L13: Entry 19 of 19

File: USPT

US-PAT-NO: 5273901

DOCUMENT-IDENTIFIER: US 5273901 A

TITLE: Genetically engineered coccidiosis sporozoite 21.5 Kb antigen, ac-6b

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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KWWC

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